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## THE DEVELOPMENT OF CREDIT.

ONE of the most remarkable phenomena of modern financiering is the power of credit. Credit has taken the place of money to a large extent in the larger transactions of commerce. Money has remained the common denominator of all payments, but as an actual medium of exchange has been to a great extent reduced to the subordinate function of settling retail transactions. The greater commerce of the world is carried on by a refined system of barter, in which banking credits of one sort or another are the chief factors. The economic function of a banking credit is that of a store of value, like hoarded silver or gold. It constitutes command over commodities, affording the saved or postponed title to capital.

The two fundamental elements of credit are confidence and time. The word itself is derived from the Latin *credere*, to believe, and the term used on the European continent for the credit circulation of banks of issue is the fiduciary circulation, the former word being derived from the Latin *fiducia* (trust), related to *fides* (faith). While confidence plays an important part in all operations of credit, it is not the only element of importance which they involve. Indeed, the amount of credit given as the result of confidence alone is but a small part of the volume of credit transactions. Such transactions are usually accompanied by guarantees and securities which reduce the risk to a minimum. The other element which plays a dominating part in credit transactions is that of time. The importance of this element has been pointed out by the Austrian economists, and by none with greater precision than Professor Bohm-Bawërk, in his development of the theory of interest. He points out that the interest rate and the discount rate, which in this case operate in a somewhat similar manner, constitute the difference between the present value and the future value of capital or commodities. The amount of credit or money which is granted, for instance,

upon a commercial bill is the present value of the title to future capital, and the difference which is taken out in discount is the difference between present value and future value. The operation of this rule is thus illustrated by Professor Macleod :<sup>1</sup>

So the money paid for the good will of a business, a copyright, patent, a professional practice, and so forth, is the Present Value of the Future Profits.

So when a merchant or trader trades on "Credit" he brings into commerce the Present Value of a Future Profit. He buys the goods or the labor, and gives as their price the Right to demand a sum to be paid out of the expected future profits.

So when the State contracts a loan for any public purpose it buys the Money, and gives as its price the Right to demand a series of payments out of the future income of the people.

From these elements arise the best definitions of what credit is. Professor Tucker says that it is "the transfer of something valuable to another, whether money, goods, or services, in the confidence that he will be both willing, and able, at a future day, to pay its equivalent."<sup>2</sup> The importance of the element of time is recognized by Professor Horn in this definition :<sup>3</sup>

To give credit is to consent to the adjournment of the compensation due, —to accept, in place of immediate delivery, the deferred delivery of the equivalent to which the grantor of any utility whatever (goods, services, or enjoyments) has the right.

M. Block also makes the influence of time the dominant factor of credit. He says :<sup>4</sup>

Credit is a sale, purchase, exchange, loan, or other transaction in which the delivery of a merchandise and the payment of the price, the rendering of a service and its remuneration, the advance of capital and its repayment, *are separated by an interval of time*. In other words, credit is an affair which begins in the present and ends in the future. . . . Whatever may be the differences which mark the different species of credit, they have this in com-

<sup>1</sup> *The Theory of Credit*, vol. i. p. 88.

<sup>2</sup> *The Theory of Money and Banks Investigated*, p. 121.

<sup>3</sup> *La liberté des banques*, p. 68. The same view is held by Knies, who says that "every credit operation is an exchange or sale of services, one of which is to be performed in the present, and the counter-service of the other party in the future."—*Vide ROSCHER, Political Economy*, vol. i. p. 268.

<sup>4</sup> *Les progrès de la science économique*, vol. i. p. 481.

mon — that the act which terminates the transaction is separated by time from the act which begins it. This is its distinctive sign.

If it were possible for capitalistic production to be carried on without money or credit, the only methods of accumulating a surplus would be by hoarding one's own product, or exchanging it against the raw material or finished goods of another and hoarding these. The use of money first made it possible to hoard the fruits of surplus production in the precious metals. This is still done in India and other semi-civilized countries and was done on the continent of Europe down to a very recent time. But the supply of metallic money would be inadequate to the great volume of command over commodities which is constituted by banking credits. The existence of these credits, therefore, affords a means of postponing consumption, and of keeping the capital of the individual in a more fluid state than if it had to be kept in goods. Banking credits represent saved capital over and above the actual materials of current production. They represent purchasing power, but a purchasing power which is not being converted to the immediate purpose of exchange. So far as such credits represent only the working capital of active producers, they are likely to be applied at an early date either to purchases of additional raw materials for production or to purchases for consumption. Bohm-Bawërk truly says that the stock of capital in hand is essentially "nothing else than an aggregate of consumption goods in a transition state."<sup>1</sup> The mechanism of banking credits gives a mobility to the command over these goods which sometimes produces disastrous consequences, but is, nevertheless, one of the necessary conditions of modern industrial development.

The development of credit has been an almost necessary incident of the growth of capital. The great modern accumulations of capital could not be moved without credit; credit would have but a narrow field of operation without these great capitals. Credit was undoubtedly employed upon a limited scale, even before the use of metallic money, in the sense that goods were

<sup>1</sup> *The Positive Theory of Capital*, p. 93.

given without the immediate receipt of an equivalent ; but credit in its modern sense, permitting the transfer of large quantities of commodities and the inauguration of great enterprises without the transfer of anything but written instruments, would be of little avail except in countries where there was an accumulation of surplus capital. Great accumulations of capital not required either for immediate consumption or for maintaining existing processes of production, and therefore awaiting investment in new enterprises, are an essentially modern phenomenon. There were some such accumulations in the ancient world, and they were accompanied by a considerable development of commercial credit. There were some accumulations also in England early in the last century, when interest rates fell so low that government three per cents were quoted at 107 ;<sup>1</sup> but these accumulations would have been inadequate to meet the demands for new capital now put forth in a single quarter.<sup>2</sup> How different are modern conditions from the old, even those of a very recent past, is indicated by Bagehot as follows :<sup>3</sup>

We have entirely lost the idea that any undertaking likely to pay, and seen to be likely, can perish for want of money ; yet no idea was more familiar to our ancestors, or is more common now in most countries. A citizen of London in Queen Elizabeth's time could not have imagined our state of mind ; he would have thought that it was of no use inventing railways (if he could have understood what a railway meant), for you would not have been able to collect the capital with which to make them. At this moment, in colonies and all rude countries, there is no large sum of transferable money ; there is no fund from which you can borrow, and out of which you can make immense works.

These credits have enormously increased within the last century and especially within the last quarter of a century. When Bagehot wrote, the combined banking credits of the four great money centers of the world—London, Paris, New York, and

<sup>1</sup> BASTABLE, *Public Finance*, p. 586.

<sup>2</sup> The applications for new capital for joint stock companies on the London market, during the first quarter of 1898, were £48,054,000.

<sup>3</sup> *Lombard Street: Works*, vol. v. p. 7. Upon this subject of modern accumulations of capital, see article by the present writer on "The Economic Basis of Imperialism," *North American Review*, September 1898, vol. clxvii. p. 326.

Berlin—were 200 million pounds (1000 million dollars). These were the banking credits of the national and commercial banks. The volume of commercial credits at the close of 1897 included deposits in the London banks alone of £331,211,000 (1600 million dollars), while the Bank of France and the big credit societies of Paris added more than 2500 million francs (500 million dollars), the German banks added 11,246.1 million marks (2800 million dollars),<sup>1</sup> and the New York City banks added 700 million dollars. Here was a fund of commercial credits alone amounting to 5600 million dollars or more than five times the amount in Bagehot's time. These commercial deposits, however, do not indicate the entire volume of saved capital which takes the form of banking credits. The deposits in the savings banks of the leading countries of the world are nearly 7000 million dollars and thus more than equal the commercial banking resources of the money centers for which the figures have been given.<sup>2</sup>

The forms of credit with which the science of money has most to deal are bank notes and other banking credits. These credits have been largely substituted for metallic money in exchanges. Money itself, by the convention of civilized societies, is a form of credit.<sup>3</sup> It is an intermediary between the goods one produces or the services one renders and the goods and services on the other side which one desires to obtain in exchange. Money is purchasing power and credit is purchasing power. Metallic money is the natural medium of exchange in a community where confidence is lacking or credit is undeveloped.

<sup>1</sup> *L'économiste européen*, August 12, 1898, vol. xiv. p. 203, and September 9, 1898, vol. xiv, p. 341.

<sup>2</sup> *Vide, Monthly Summary of United States Bureau of Statistics*, July 1898, p. 280. The deposits in 1895 in all civilized countries except Russia, as there given, are \$6,604,546,473. The deposits in Russian savings banks on March 1, 1898, were 235 million dollars.—*Bulletin Russe de Statistique*, April-June 1898, p. 400. The figures of commercial credits include some banks and cities not included by Mr. Bagehot, but the very fact that these banks and cities have attained importance since his time adds to the force of the comparison.

<sup>3</sup> The person who takes money as such must always harbor the hope of being able to dispose of it again as money.—ROSCHER, *Political Economy*, vol. i. p. 351.

It possesses exchange value in itself. A banking credit, on the other hand, is only a paper certificate that the holder has delivered certain goods or rendered certain services to some other member of the community and is entitled to an equivalent. A banking credit, whether a bank note or a deposit receipt, may be described as a certificate of barter. It gets rid of the inconvenience of direct barter in the same manner that metallic money does,—by giving in exchange for goods or services an order for other goods or services which may be tendered for any article or service at the option of the holder of the order. The man who renders a service for which he receives a bank check in payment, which he deposits with the bank, has to his credit a written record that he is entitled to obtain from society an equivalent for his original service. He is enabled to postpone the use of this power as long as it suits his convenience. When he does use it, he transfers to another the certificate of the indebtedness of society to him. Banking credits represent, therefore, a system of barter by which the substitution of certificates of barter for direct exchange of goods, man to man, permits the completion of the two halves of an exchange at different dates and gives freedom of choice among the objects of exchange.

So simple does this method of exchange appear, by certificates of barter, that it is declared by M. Ernest Solvay, that if it had been adopted from the beginning "the system of actual money would have appeared barbarous by its illogical and inconvenient character."<sup>1</sup> The maker of a pair of shoes, for instance, instead of exchanging them directly for a bushel of wheat, would accept a banking credit which was really an order, signifying to society that he had delivered a pair of shoes and was entitled to the equivalent in some other merchandise. A banking credit might be recorded in his favor, without the existence of any monetary unit, by the simple declaration that he was entitled to the equivalent of a pair of shoes. Society, in such a case, would be able to conduct exchanges without money by means of credit,

<sup>1</sup>"Le comptabilisme social," *Annales de l'Institut des Sciences Sociales*, March 1897, vol. iii. p. 3.

but the difficulties would be the same in respect to the lack of a common denominator which were encountered when there was no money. The adoption of a common denominator is necessary to facilitate comparisons of one article with another. Even this step could be taken without the intervention of coin, if the denominator could be given a fixed value. If an abstract dollar could thus be created as the equivalent of a bushel of wheat, such dollars could be printed or could be transferred on the books of a bank without the employment of any metallic money.

The principle underlying this exchange of commodities against each other, by a refined form of barter, is important, because it tends to show the minor part played by the metals in exchanges. A community which should be able to conduct exchanges in this manner might be no less rich, and its transactions would be in some senses no less secure, than if its exchanges were conducted in coin. It is the exchange of one commodity for the other which constitutes the essence of the transaction. The intervention of the terms of money is necessary simply to provide a common denominator; the adoption of metallic money as a standard is necessary to give certainty to the common denominator. But in both capacities metallic money is required only in limited quantities, much as the official bushel measure is required as a gauge of many private certificates of measurement. Aside from the operation of this test, credit operates as an effective instrument of exchange. Its wide use destroys the value of reasoning based upon the theory of a fixed relation between the quantity of credit and metallic money and does much to justify the declarations of Lord Farrer:<sup>1</sup>

“Credit” is not simply a means of using less gold. “Credit” or “debt” is a substitute for gold as a circulating medium, which has in some places almost displaced its principal, and which may displace it entirely, or almost entirely, as nations advance in commercial aptitude. Its functions are so great and so important that modern commerce would without it not only have been more difficult, but could not possibly have been carried on. If it is an economy, it is an economy only in the sense in which the railway or the steamship can be considered economies. It makes exchanges possible just as the

<sup>1</sup> *Studies in Currency*, 1898, p. 91.



railway and the steamship make the transportation of goods possible. It is as great, if not as visible, an instrument in erecting the gigantic fabric of modern trade as steam or electricity.

There are several forms of commercial credit, some involving a specific pledge of commodities and others resting upon the general solvency and wealth of the person to whom the credit is granted. The most common form of banking credits is the granting of discounts. In a typical case of discount the manufacturer of goods receives from his customer, the merchant, a note or bill for the value of the goods, due in three months or less. If there were no banks nor money-lenders the manufacturer could not obtain the proceeds of the bill nor make use of it until the three months had passed (unless he parted with the whole of it for goods). But the banker will accept the bill, if he regards the manufacturer and the merchant as solvent, and give the holder at once its present value in money, or in a banking credit which is the equivalent of money in the command over goods. With this money or credit the manufacturer is enabled at once to purchase new raw materials, to pay wages, and to continue without interruption the processes of production. When the bill becomes due, the merchant has obtained money or credits by the sale of the goods, and has the means for paying it. A banking credit is, therefore, usually the title to future payment given by a purchaser of goods, which has been converted by the bank into a title to the immediate command over any commodity.

The theory of banking operations adopted by some of the older writers was that bank notes and banking credits were directly representative of commodities. The conception was, in effect, that the man who sold a bill of goods, receiving therefor a bill of exchange, created the legitimate occasion for the issue of bank notes to the face value of the bill of exchange, minus the usual banking charges. The notes were supposed to represent the goods and remain in circulation until the extinguishment of the debt, when a corresponding amount of notes were brought to the bank to take up the bill of exchange. Professor

Macleod has rendered a service to economics in pointing out that there is no such close connection in fact between the goods and the banking credit, and that the obligations created are not direct liens upon the goods, but personal obligations. He shows that the same goods which were first sold for a bill of exchange may become the subject of a dozen bills as they pass from one hand to another, so that there is not even an indirect lien upon the goods of an exclusive character for the payment of the first bill. Professor Macleod was one of the first to demonstrate that banking credits are not based upon specific commodities which are pledged for their redemption, but are in law a general personal right of action. His statement of the legal relations between the bank and its customers is as follows :<sup>1</sup>

Suppose that a person pays in a sum of money to his account at his banker's—what becomes of that money? It becomes the absolute property of the banker. The customer cedes the absolute property in money to the banker; but he does not make him a present of it. He gets something in exchange for it—and what is that something? In exchange for money the banker gives his customer a credit in his books, which is a right of action to demand back an equivalent sum of money whenever he pleases. But it is not a title to any specific sum of money in the banker's possession. It is a mere abstract right of action against the person of the banker to demand a sum of money from him. The transaction is a sale or an exchange: the banker buys the money from his customer by issuing to him in exchange for it a right of action, and the customer buys this right of action with gold.

Furthermore, the banker agrees that his customer may transfer this right of action to any one else he pleases by means of a bank note or check.

This statement refers to a money deposit, but the same principle applies when a note is discounted and the amount granted by the bank is placed to the credit of the customer. Notwithstanding this demonstration, there is a general relationship between the volume of production the number of bills of exchange created, and the issue of bank notes and banking credits. If production is extensive, there is a greater demand for credit, more bills are created, and more bank notes are issued. When the activity of production diminishes, fewer bills are presented

<sup>1</sup> *Theory of Credit*, vol. i. p. 19.

for discount, the bank notes in the hands of the public come into the bank on deposit, and there is less demand for their reissue. The credit of the borrowers from the bank upon the bills of exchange, moreover, while it is a personal credit in form, and does not constitute a direct lien upon the particular bill of goods, does in fact depend in a large measure upon the volume of business done by the borrowers, the quantity of goods they produce, and the available assets in the form of goods and raw materials which are in their hands or are believed by the grantors of credit to be there. Professor Leroy-Beaulieu rightly declares that purely personal credit, not supported in any manner by goods, is rare, and is more often extended for purposes of consumption than for those of production. He says:<sup>1</sup>

Credit should not be a simple anticipation upon future and uncertain wealth; it should have for its basis a thing real and actual—goods which are finished and which have not been sold; goods which having been sold have not yet been paid for; goods even which are in process of manufacture and of which all the elements have been gotten together; an enterprise which is not terminated, but which is already in a certain degree of advancement.

The uses of credit are so numerous and it has acquired such wide extension in modern commerce that some of the more enthusiastic students of the subject have taken the ground that the creation of credit is the creation of a new capital, adding greatly to the capital in land, labor, and their products which would be available for the purposes of production if credit was not employed. Professor Macleod has made this proposition the leading theme of his economic works. He has endeavored to convict earlier economists of having acknowledged that credit is purchasing power, that purchasing power is wealth, and that, therefore, credit is wealth, independently of the resources of a country in land, labor, and material things. He declares "that the only true definition of wealth is—everything whose value can be measured in money, or which can be bought and sold—*everything* which has *purchasing power*." As "personal credit

<sup>1</sup>*Traité d'économie politique*, vol. iii. p. 358. Professor Courcelle-Seneuil says that "credit can only be maintained so far as the capital of which it is the object is preserved, and it can scarcely be preserved unless it is well employed."—*Ibid.*, p. 256.

can be valued in money," and is purchasing power, it follows, in his opinion, that personal credit is wealth. The contention that personal credit is wealth turns largely upon the use of terms. There is no doubt of the value of the personal qualities—the training, intellectual acquirements, and character—which enable a man to obtain credit. They are wealth to him and wealth to the community. But the contention of Professor Macleod goes beyond this, and insists that the credit itself is wealth, independently of both material things and the qualities which command credit. After defining the character of abstract legal rights to money in the form of credits, he declares that "by the fundamental laws of natural philosophy these *abstract rights* are all *wealth*."<sup>1</sup> This is true, so far as it relates to the position of the individual. The possession by him of titles to wealth is wealth under the legal rules of all civilized nations. But the question is different when this wealth is considered in its relations to the aggregate wealth of the community. The creation of a mass of abstract rights does not add to the wealth of the community, unless they are rights to property in other communities. One is simply the representative and shadow of the other. The ability to obtain credit is personal wealth, but the aggregate abilities of individuals to obtain credit, or the credit which they have actually succeeded in obtaining, cannot be added to the ascertained visible wealth of the community in order to determine its aggregate wealth.

The real potency of credit is found in the facilities which it affords for the transfer of capital. It is a natural evolution of the great accumulations of saved capital in modern society. Capital could not be saved except in the form of commodities, as has been pointed out, if there were not money or credit; credit would be of little importance and small extent if there were not great masses of saved capital upon which it might operate. Bagehot, in describing the British money market, declared that it represented, "By far the greatest combination of economical power and economical delicacy that the world has

<sup>1</sup> *The Theory of Credit*, vol. i. p. 22.

ever seen.”<sup>1</sup> This power and delicacy it owes to the means which credit affords for giving vitality to capital. Professor Cauwès sets forth four advantages of credit in promoting production.<sup>2</sup> (1) Credit stimulates the movement of business, multiplies markets for the benefit of capital, creates the means of buying and producing; (2) for those who have, credit provides a profitable investment for funds which they would not or could not themselves make use of; (3) for those who conduct an enterprise it affords the supplementary capital which they need for carrying on their business; (4) for all producers, credit represents a gain of time, and therefore of money.

Professor Leroy-Beaulieu, in a careful review of the effect of credit, ascribes to it the three important functions of permitting the transfer of capital, promoting its accumulation, and affording an auxiliary to metallic money.<sup>3</sup> The transferability of capital is perhaps the most important phase of credit in its modern development. This quality of transferability permits the shifting of capital from one trade to another and from one country to another. It gives flexibility to modern industry. It permits the man who has made savings, but is not engaged in an occupation in which he can employ them, to transfer them to those who can employ them. The system of banking credits, which gives to saved capital general purchasing power, permits the transfer of such credits to borrowers who are able to employ them in great producing industries. Capital is thus transferred from the hands of many small capitalists into the hands of a producer and is made profitable to the whole community. But credit gives to capital a greater degree of transferability than this. It affords the opportunity for diminishing the capital employed in an industry which is proving unproductive and increasing the amount employed in an industry which is proving attractive by increased profits. How this is done is described by Bagehot as follows:<sup>4</sup>

<sup>1</sup> *Lombard Street: Works*, vol. v. p. 8.

<sup>2</sup> *Cours d'économie politique*, vol. ii. p. 263.

<sup>3</sup> *Traité d'économie politique*, vol. iii. p. 374.

<sup>4</sup> *The Transferability of Capital: Works*, vol. v. p. 286.

There is the whole of the loan fund of the country lying in the hands of bankers and bill brokers, which moves in an instant towards a trade that is unusually profitable, if only that trade can produce securities which come within banking rules. Supposing the corn trade to become particularly good, there are immediately twice the usual number of corn bills in the bill brokers' cases; and if the iron trade, then of iron bills. You could almost see the change of capital, if you could look into the bill cases at different times.

One of the most striking cases of the transferability of capital in modern times is its transfer between nations. When Ricardo wrote early in the present century, he drew a distinction between the adjustment of prices within a nation and their adjustment between nations. "The difference in this respect," he declared, "is easily accounted for, by considering the difficulty with which capital moves from one country to another, to seek a more profitable employment, and the activity with which it invariably passes from one province to another in the same country."<sup>1</sup> The events of the last half century have almost abolished this distinction. Capital flows freely from one nation to the other under the attraction of differences in the discount rate and profitable investments. The transfers due to the discount rate are the best illustration of the transferability of capital, but they have less effect upon the permanent economy of a nation than the transfers which have taken place from other causes and for longer terms. The law of the marginal utility of capital gives it a higher earning power in new countries, where there is little saved capital, than in old countries, where there is a comparative excess. The result has been to attract great masses of the saved capital of old countries to the less developed countries.

The manner in which capital is thus transferred from one country to another, affords the best illustration of the workings of the credit system and the benefits which it has conferred upon society. This saved capital of the old world has been transferred to the new world almost altogether by means of the credit system. It would not and could not have been transferred without it. The transfer has not been made to any considerable extent in metallic money, but in commodities for which credit has been

<sup>1</sup> *The Principles of Political Economy and Taxation*, p. 116.

granted. The credit system has made possible the proposition, that international loans are made in commodities and not in money. The new countries have been developed by the transfer to them of commodities, for which the full equivalent has not been demanded back. Great Britain, for instance, has furnished to these countries great quantities of agricultural and manufacturing machinery, as well as the more perishable commodities or immediate consumption, and has been contented with the payment of the interest on their value rather than with payment in full. The British manufacturer himself may have received full payment, but other Englishmen have provided the means of payment by purchasing the government and industrial securities of the new countries. The effect of the operation has been that they have turned over their saved capital to the manufacturers of the machinery and commodities in England, on behalf of the purchasers in the undeveloped countries, and have accepted in return only an interest on their loan to these countries. This transfer of capital has afforded at once a means of development of the new countries and a means of earning a return upon their capital to the older countries. Mr. Noyes has vividly set forth the eagerness with which Great Britain was engaged, from 1886 to 1890, "in developing the resources of young foreign communities, taking securities in payment."<sup>1</sup> During the five months from February to August, 1890, 100 million pounds in new securities were brought out on the London market. Only by some such process as this could the great and rapid development have occurred which has taken place west of the Mississippi, in Australia, in Japan, and in South Africa within the memory of men still young.<sup>2</sup> Very different has been this development from that of the colonial settlements of the sixteenth and seventeenth centuries, when the colonists had in some degree to begin where the first semi-civilized people began, with only a small equip-

<sup>1</sup> *Thirty Years of American Finance*, p. 156.

<sup>2</sup> Foreign capital invested in the United States was estimated in 1895 to amount to 2,500 million dollars.—*Vide* CONANT, *Modern Banks of Issue*, p. 526, note. The British capital invested in joint stock companies in Australia in 1897 was £386,801,000 (1,928 million dollars).—*London Economist*, September 17, 1898, vol. lvi. p. 1353.

ment of the tools of production and under the necessity of great sacrifices in order to set aside from their annual product the means of increasing their tools of production for the future.<sup>1</sup>

The promotion of saving and the conversion of saving into working capital constitute the second group of advantages belonging to credit. "Capital," declares Professor Leroy-Beaulieu, "is saving become active and applied to production, instead of simply hoarded." In countries where credit is not diffused, he says, "small capitals remain in a state of isolation and unproductiveness, constituting an individual resource for the future, but not an immediate social resource."<sup>2</sup> But he shows, under the head of capital, that "Thanks to the division of labor in modern societies, simple saving, provided it is followed by an investment, is equivalent to capitalization."<sup>3</sup> How banking credits operated from the beginning to make capital fruitful is described by M. Guillaume de Greef in this language:<sup>4</sup>

When advances of money or merchandise are involved, such capital is not augmented by credit; its vitality only is increased. We have already seen that banks of deposit, transformed naturally by the course of events into banks of discount and advances, were the first forms of the generalization of this important service. They centralized available capital, and substituted themselves at least in part for private forms of deposit, of loans, and of exchange. They distributed capital, which had been tempted and accumulated into their reservoirs, in all directions where it would be most active and most fertile. Its flow, abundantly and constantly fed by a thousand individual streams, became more regular and extended over wider spaces with an enormous economy of time, of risks and of costs. The rates and variations of the offer and demand of capital became less excessive, thanks to their influence, even in private operations; they tended to a level, like a genuine system of irrigation over areas of culture more and more extended. In this sense and within these limits, credit was still a force only indirectly productive. It gave to those who obtained it a purchasing power which they had not before possessed. It tended also to raise prices—not as is declared

<sup>1</sup> There are several other means than the purchase of securities—such as the grant of long mercantile credits, by which the old countries extend credit to the new, but it is the principle here which it is intended to discuss, and not the details.

<sup>2</sup> *Traité d'économie politique*, vol. iii. p. 387.

<sup>3</sup> *Ibid.*, vol. i. p. 218.

<sup>4</sup> *Annales de l'Institut des Sciences Sociales*, July 1897, vol. iii. p. 234.



by J. S. Mill and the larger number of economists, by reason of the securities which might be created, but in exciting new demands for utilities. When a consumer has credit with his storekeeper, he increases his demand and influences prices to the same extent as if he paid cash ; it is the same with advances made with a view to production.

In much the same manner speaks Professor Horn, with special reference to the stimulus given by credit to saving :<sup>1</sup>

From the hand which does not know how to put them to use, savings are carried by credit where they become fertile. Credit, by the prospect of this fertility, stimulates the creation and accumulation of capital, the sole means of increasing the national wealth. Every working faculty, physical or intellectual, is enabled by credit to obtain the aid which is indispensable to make it a productive force. Thanks to credit, productive forces, once set in motion, are capable of continued activity, the merchant and manufacturer no longer being obliged to await the return of the equivalents acquired by parting with their products.

The development of credit in its various forms has followed the same law of evolution as the development of the use of money. Gold, the highest form of metallic money, has come to play only a subordinate part in exchanges and has become chiefly a money of account rather than a medium of exchange. The process of this evolution is disputed by Professor Hadley, who says :<sup>2</sup>

We are told that people first pass through a *régime* of barter, where goods are exchanged for goods, then follows the use of money as a means of transfer ; and this in turn, in the highest stages of industrial evolution, gives place to credit. This last statement is hardly warranted by the facts. The tendency of recent times seems to be pretty clearly in the direction of an increased use of cash in mercantile transactions. It is in semi-civilized countries like Turkey that we see the fullest operation of the credit system. It is doubtless true that highly organized communities do some things on credit which less advanced communities cannot do at all. But when such operations have once become established, the tendency is towards an increasing

<sup>1</sup> *La liberté des banques*, p. 110.

<sup>2</sup> *Economics*, 233. Professor Leroy-Beaulieu approves the classification rejected by Professor Hadley, as indicating the dominating factor in exchanges at different periods, but insists that the different factors have operated and continue to operate side by side — that credit was not unknown in primitive times, and that barter is not unknown to-day.—*Traité d'économie politique*, vol. iii. p. 351.

use of cash in their consummation ; a practice which saves time, saves waste, and saves middlemen's profits.

Professor Hadley is correct in maintaining that the richer nations employ more metallic money than the poorer, where it is a convenient medium of small transactions. They can better afford to make an investment of their surplus capital in a metallic medium of exchange. This circumstance, however, should not obscure the fact that the development of credit has made metallic money a smaller factor than formerly in the whole volume of exchanges. More transactions may be settled "cash down" but the form of payment is likely to be one of the credit instruments of modern banking. This is sufficiently evident from the diminishing proportion of coin found in the settlement of banking and clearing transactions in all recent inquiries. Gold remains the money of account, by which values are expressed, but it has ceased to be the medium of exchange, except in the smaller transactions of daily life and in the settlement of balances. The greater transactions are settled by the form of credit known as the bank note, by foreign bills of exchange, or by the mechanism of deposit accounts, checks, and drafts. The relegation of gold to a special place as the standard, or money of account, is in accordance with the modern tendency to the separation of functions, which thus provides a distinctive place for the metals, while transferring the duty of a medium of exchange to the paper representatives of the value of commodities. So uniform throughout the world has been this evolution, where commerce has attained serious importance, that M. de Greef declares that :

The appearance in the economic world of substitutes for metallic money was an organic development so necessary and natural that it occurred with remarkable uniformity and in the most spontaneous manner among the most advanced commercial peoples of antiquity, and again, under the same conditions, after the undisputed decline of the first mediæval period, among modern commercial peoples. No man of genius has attached his name to the discovery, which was, nevertheless at once one of the most decisive, most important and most simple of human revolutions.<sup>1</sup>

<sup>1</sup> *Annales de l'Institut des Sciences Sociales*, July 1897, vol. iii. p. 234.

The process of the evolution of substitutes for metallic money first introduced the compensation of one item against another, and afterwards the deposit account with transfers by written order, the bill of exchange, and the transferable deposit receipt. The bank note, only partly covered by the metallic reserve, was a later growth. The first bankers at Athens and Rome confined their operations largely to the exchange of metallic money. Xenophon declared that the larger number of the cities of Greece had money having value at home and that traders at such places were compelled in consequence to make exchanges in merchandise, but that Athens was an exception and that her silver drachmas were accepted everywhere. Deposits were regularly received by the Athenian bankers and it soon became apparent that advantage would be derived from loaning the deposits. In Athens loans were sufficiently profitable to justify the payment of interest to depositors. Maritime traffic was conducted at such great profits by the Greek traders that they were able to borrow at 20 to 25 and even 35 per cent. and make a profit upon their ventures. Pledges of valuables were often taken by the bankers in such cases, but disaster sometimes occurred and serious bankruptcies resulted.<sup>1</sup> The bankers in Athens were known as *trapezitai* and those in Rome as *argentarii* (dealers in silver).<sup>2</sup> The banking business was subjected to official regulation in both Athens and Rome. The Roman laws required the *argentarii* to produce their accounts for official inspection and prescribed that they should keep a cashbook, a deposit book, and a daybook.

The transfer of credits was permitted at Athens by the law of Solon, and commercial paper from Phoenicia and Egypt was negotiated upon the Athenian market. The fact that the bankers conducted the exchange of the money of all countries naturally

<sup>1</sup> CRUCHON, *Les banques dans l'antiquité*, p. 29.

<sup>2</sup> M. CRUCHON enumerates more than sixty titles of different classes of persons dealing with monetary matters at Rome. Some of these were public officials, and the exact character of the business done changed from time to time, even where old names were retained.—*Les banques dans l'antiquité*, p. 35.

made them authorities in monetary matters. At Athens they kept accounts for their clients, which they were compelled to produce upon requisition, and their accuracy and technical knowledge led to their frequent employment for verifying the accounts of the republic. From such conditions arose the system of compensation, or setting off of one account against another. How naturally this system arose is set forth by Mr. Jevons :<sup>1</sup>

Those who frequently traded with each other, both buying and selling, found that it was absurd to pay a sum of money for what was bought, and then receive it back for what was sold. It was sufficient to estimate in terms of money the values of the articles exchanged, and then pay the difference, if any, in actual cash.

Creditors at Athens preferred to be paid at the table of the banker, in the market place, to avoid the danger of receiving debased money and to escape the care of guarding and holding unproductive coin. Debtors, on their side, found an important advantage in the fact that the books of the banker afforded a proof that their debt had been discharged. After payments in the presence of the banker became common, it was an inevitable step, where both parties had accounts with same banker, that the transactions should be effected by a transfer, the simple entry of the payment and credit on the two accounts, without the intervention of metallic money. There is reason for believing that instruments of commercial credit were in use in Assyria, even while the precious metals passed by weight, and before the employment of official coinage. Traces of credit by compensation and by transfer orders are found in Assyria, Phœnicia, and Egypt before the system attained full development in Greece and Rome. The books of the old Sanskrit lawgiver, Manu, are full of regulations governing credit. He speaks of judicial proceedings, in which credit instruments were called for, of the interest on loans, of bankers, usurers, and even of the renewal of commercial paper.<sup>2</sup> The commercial obligations of Assyria were imprinted on cakes of clay, specimens of which have come

<sup>1</sup> *Money and the Mechanism of Exchange*, p. 192.

<sup>2</sup> CRUCHON, *op. cit.*, p. 14.

down to modern times. They are supposed to date from the eighth or ninth centuries before the Christian era, and include simple acknowledgments of indebtedness, bills guaranteed by a third party, bills transferring credits to a third party, and bills drawn from one place upon another.<sup>1</sup>

The mechanism of credit at Rome was in some respects less advanced than in the ancient civilizations of Asia.<sup>2</sup> Instruments of credit are recognized in the earlier Imperial laws and in the Justinian Code, but the night of barbarism, which obscured letters and the arts in the western world during the Middle Ages, destroyed for a time the security of commercial transactions and the system of credit depending upon such security. It remained for the Jews to frame again the theory of bills of exchange and for the merchants of the Italian cities to lay the foundations of modern banking.<sup>3</sup> It was at Lyons, the entrepôt of Italy in the Middle Ages, that bills of exchange first became common in modern times, and it was there also at the fairs that the settlement of debts by compensation was accomplished while legal safeguards were too slender to justify extensive credit transactions. The operation is described by Professor Macleod as follows : <sup>4</sup>

Merchants in France and other countries did not make their bills payable at their own houses, where they must have kept large sums in specie to meet them, but they made them payable only at these great fairs. In the meantime their bills circulated throughout the whole country, and performed all the functions of money. On a fixed day of the fair the merchants met together and exchanged their acceptances against each other. By the principle of *compensation*, which will be more fully described in a future chapter, these acceptances exchanged, reciprocally paid, discharged, and extinguished each other. Boisguillebert, the morning star of French economics, says, that at the fair of Lyons, 80 millions of bills paid and discharged each other, without the use of a single coin.

<sup>1</sup> LENORMANT, *La monnaie dans l'antiquité*, vol. i. pp. 114-117. M. Lenormant presents French translations of five of these curious documents, and declares that many which have not been published exist in the British museum.

<sup>2</sup> LENORMANT, *op. cit.*, vol. i. p. 121, note.

<sup>3</sup> *Vide* BLANQUI, *Histoire de l'économie politique*, vol. i. p. 193.

<sup>4</sup> *The Theory of Credit*, vol. i. p. 95.

The revival of banking inevitably waited upon the restoration of social order and the extension of commerce which followed the discovery of the new world. How it began within narrow circles in Italy and Spain and how it extended with the growth of commerce cannot be narrated in this article.

CHARLES A. CONANT.

WASHINGTON, D. C.